

03 Title: Incoming Rotational Beam Testing of NDC Lot #51627-2A

NDC Lot # 51627-2A

Heat Treatment: 485°C, 30 minutes

Test Temp: 37°C  $\pm$  1°C

Sample length - 4.36"

Chuck gap - 1.73"

<u>ID</u>	<u>Diameter (in)</u>	<u>Cycles</u>	<u>% strain, %</u>	<u>Crack Shelf</u>
8-129-1	0.013	28611	0.75	Top
8-129-2	0.013	28216	0.75	Top
8-129-3	0.013	10445	0.75 *	Top
8-129-4	0.013	31416	0.75	Top
8-129-5	0.013	28511	0.75	Top
8-129-6	0.013	31563	0.75	Top
8-129-7	0.013	30810	0.75	Top
8-129-8	0.013	22557	0.75	Bottom
8-129-9	0.013	23655	0.75	Bottom
8-129-10	0.013	25709	0.75	Bottom
8-129-11	0.013	25923	0.75	Bottom

\* Sample appears to be an outlier. The most probable cause for the low cycles to failure is improper loading of sample into chuck and inadequate hold on the sample. This will lead to improper functioning of the cycle counter. Sample is excluded from calculations.

Average: 27696

min: 22557

St dev: 3164

max: 31563

There appears to be a difference between samples taken from the top shelf & bottom shelf. This will be examined further.

Amir Patel 8-11-03

Signature 8/11/03

9-9-03 Title: Incoming Rotational Beam Testing of NDC Lot # 51813-1

NDC Lot # 51813-1

Heat Treatment: 485°C, 30 minutes

Test Temp: 37°C  $\pm$  1°C

Sample Length: 4.36"

Chuck gap: 1.73"

ID	Diameter (in)	Cycles	% strain	Oven Shelf
8-130-1	0.013	18278	0.75	Top
8-130-2	0.013	18286	0.75	Top
8-130-3	0.013	18173	0.75	Top
8-130-4	0.013	19159	0.75	Top
8-130-5	0.013	19365	0.75	Top
8-130-6	0.013	20950	0.75	Bottom
8-130-7	0.013	20755	0.75	Bottom
8-130-8	0.013	20263	0.75	Bottom
8-130-9	0.013	25844	0.75	Bottom
8-130-10	0.013	24271	0.75	Bottom

Avg: 20504  
Std dev: 2612

Min: 18173  
Max: 25844

AP 9-9-03

Angie Pao 9-9-03

Signy a/a/03

9-11-03 Title: Incoming Rotational Burn Testing of NDC Lot # 51813-2A

NDC Lot # 51813-2A

Heat Treatment: 485°C, 30 minutes

Test Temp: 37°C  $\pm$  1°C

Sample length: 4.36"

Chuck gap: 1.73"

<u>ID</u>	<u>Diameter (in)</u>	<u>Cycles</u>	<u>% Strain</u>	<u>Over Shelf</u>
8-131-1	0.013	20744	0.75	Top
8-131-2	0.013	18236	0.75	Top
8-131-3	0.013	21317	0.75	Top
8-131-4	0.013	21220	0.75	Top
8-131-5	0.013	20682	0.75	Top
8-131-6	0.013	17841	0.75	Bottom
8-131-7	0.013	18945	0.75	Bottom
8-131-8	0.013	20694	0.75	Bottom
8-131-9	0.013	20581	0.75	Bottom
8-131-10	0.013	19679	0.75	Bottom

Arg: 19994  
St Dev: 1249

Min: 17841  
Max: 20744

Avij Patel 9-11-03

Sanjiv Jang

9/11/03

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10-14-03 Title: Rotary beam testing of Panacor Lot # 0264.

Heat treatment: 485 °C, 30 minutes

Sample length: 4.36"

Chuck gap: 1.73"

ID	Diameter (in)	Cycles	% strain
8-132-1	0.013	21687	0.75
8-132-2	0.013	24205	0.75
8-132-3	0.013	25049	0.75
8-132-4	0.013	25011	0.75
8-132-5	0.013	21916	0.75
8-132-6	0.013	22906	0.75
8-132-7	0.013	26101	0.75
8-132-8	0.013	21212	0.75
8-132-9	0.013	22967	0.75
8-132-10	0.013	24043	0.75

Avg: 23509.7

min: 21212

St dev: 1630

max: 26101

Anuja Patil 10-15-03

Jim Dwyer 10/15/03

10-30-03 Title: Rotary beam testing of Paracor lot # 0269

Heat treatment: 485°C, 30 minutes

Sample length: 4.36"

Chuck gap: 1.73"

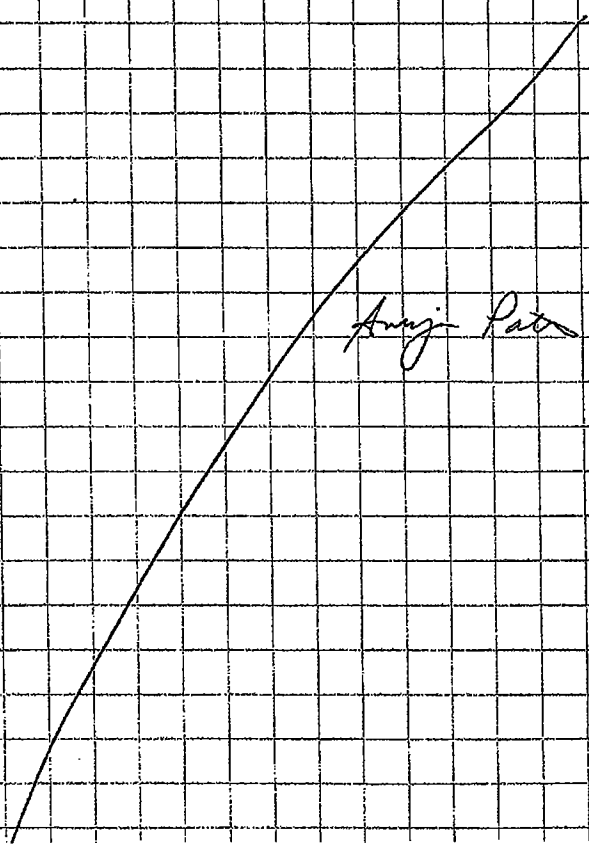
ID	Diameter	Cycles	% Strain
8-133-1	0.013	16966	0.75
8-133-2	0.013	17754	0.75
8-133-3	0.013	18324	0.75
8-133-4	0.013	19705	0.75
8-133-5	0.013	19811	0.75
8-133-6	0.013	19859	0.75
8-133-7	0.013	17813	0.75
8-133-8	0.013	19704	0.75
8-133-9	0.013	20697	0.75
8-133-10	0.013	20136	0.75

Avg: 19077

St dev: 1250

min: 16966

max: 20697



Amir Patel 10-30-03

10/30/03

5-03 Title: Rotary Beam Testing of Purocor Lot # 00284

Heat Treatment:  $485^{\circ}\text{C}$ , 30 min

Sample length: 4.36"

Chuck gap: 1.73"

ID	Diameter (in)	Cycles	% Strain
8-134-1	0.013	25833	0.75
8-134-2	0.013	27641	0.75
8-134-3	0.013	26648	0.75
8-134-4	0.013	30143	0.75
8-134-5	0.013	31505	0.75
8-134-6	0.013	28950	0.75
8-134-7	0.013	27770	0.75
8-134-8	0.013	28392	0.75
8-134-9	0.013	26903	0.75
8-134-10	0.013	25030	0.75

Avg: 27882

St. Dev: 1959

Min: 25030

Max: 31505

Amiga Pro 11-5-03

Jim Jorg 4/6/03

1-15-04 Title: Rotary Beam Testing of Paracor lot #0443

Heat Treatment: 485°C, 30 min

Sample Length: 4.36"

Chuck gap: 1.75"

ID	Diameter (in)	Cycles	% Strain
8-135-1	0.013	24561	0.75
8-135-2	0.013	22664	0.75
8-135-3	0.013	15981	0.75
8-135-4	0.013	22726	0.75
8-135-5	0.013	20210	0.75
8-135-6	0.013	23031	0.75
8-135-7	0.013	25152	0.75
8-135-8	0.013	22376	0.75
8-135-9	0.013	24999	0.75
8-135-10	0.013	21476	0.75

Avg: 22318  
Std dev: 2715

min: 15981  
max: 25152

Amir Patel 01/15/04

SGV 1/15/04

146

7-30-04 Title: Rotary beam testing of Paracore Lit # 0696.

Heat Treatment: 485°C, 30 min

Sample length: 4.36"

Chuck gap: 1.73"

ID	Diameter (in)	Cycles	% Strain
8-146-1	0.013	29252	0.75
8-146-2	0.013	21929	0.75
8-146-3	0.013	27850	0.75
8-146-4	0.013	22716	0.75
8-146-5	0.013	27465	0.75
8-146-6	0.013	27448	0.75
8-146-7	0.013	27478	0.75
8-146-8	0.013	30024	0.75
8-146-9	0.013	27421	0.75
8-146-10	0.013	27825	0.75

Avg: 26937.8  
Std Dev: 2591.54Min: 21929  
Max: 30024

AP 7-30-04